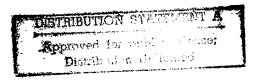
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Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT



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WORLDWIDE REPORT

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

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BERNAMA FULLY COMPUTERIZED

Kuching THE BORNEO POST in English 18 Jun 84 p 14

[Text] KUALA LUMPUR, Sun.--Bernama today put its editorial computer system into operation, making it the first national news agency in Asia to be fully computerised.

Its general manager, Encik Ahmad Mustapha Hassan, pressed a button this morning to move the first news item which had been electronically edited over the domestic wire.

The brief but historic ceremony was witnessed by editor-in-chief Encik Ahmad Rejal Arbee and other senior Bernama officers as well as Encik J. G. Thompson, the managing director of the International Management and Operational Systems Ltd. (IMOS), the supplier of the computer system.

Encik Ahmad Mustapha said that with the introduction of the computer system, Bernama will be able to operate more efficiently and provide better and a wider range of services to both media and non-media organisations.

The 2.5 million computer system as fully duplicated for reliability.

With the introduction of the system, Bernama will be launching its foreign news service. This service will be a composite service made up of news selected from all major international wire agencies and about 30 other national news agencies.

Subscribers will, however, continue to be able to receive full and unedited news from any or all of the international news agencies.

In conjunction with the computerisation, the Bernama Economic service has also been expanded into a full-fledged service providing a comprehensive coverage of national and international economic news.

Bernama has also taken advantage of this computerisation to improve its coverage of national news by introducing an integrated domestic news service providing news in both Bahasa Malaysia and English.

News services to Sabah and Sarawak will also be improved with the better coverage of national, economic and foreign news for subscribers in the two states.

Encik Ahmad Mustapha said that among the new services that Bernama would be introducing was the video news services for banks, hotels, shopping complexes and other public places.

Encik Ahmad Mustapha said that Bernama was in a position to supply a greater variety of news to its subscribers as it received some 400,000 words daily from the various news agencies around the world.

He said that Bernama hoped to improved its communications network by the end of the year to enable it to deliver speedily news, financial data and photographs to its subscribers throughout the country.

Encik Ahmad Mustapha, who is also the president of the Organisation of Asia-Pacific News Agencies (OANA), said that the introduction of the computer system would also enable Bernama to improve copy flow to the Asean news exchange and other regional and international news organisations of which Bernama was a member or had exchange agreements, such as KYODO, ANTARA, PTI, IINA and Ansa.

Encik Rejal said the computer system was installed in a purpose-built editorial floor and consisted of a fully duplicated system and 51 video display terminals.

He said that every precaution had been taken to ensure that the transition was smooth.

However, he hoped that the subscribers would understand if there were any shortcomings in the initial period of the changeover.

It is our intention to provide our subscribers with an even higher standard of service, which is the main objective of computerising our operations, he said.

The system used by Bernama is the Imos model 401 Newsmaster which is used by leading news agencies in the world.

BELL LIKELY TO GET BIG TELEPHONE CONTRACT

Bangkok BANGKOK POST in English 9 Jul 84 p 17

[Text]

THE Telephone Organisation of Thailand is likely to approve Bell (Canada) International's proposal to invest between 4,000 to 6,000 million baht in a full digital telecommunications network in Thailand.

According to a TOT board member, a committee — set up by TOT chairman Gen Arthit Kamlang-ek and chaired by managing director Sombat Kamasathien — found the Bell proposal very attractive.

Eight other foreign firms reportedly submitted proposals to the TOT, but the committee, after nearly two months of study, agreed that the Bell proposal contained the best information and terms.

"Gen Arthit was briefed on the proposal after Bell submitted it in May. He found it very interesting and ordered a committee set up to consider and compare Bell's proposals with the other firms' and to report its findings to the board as soon as possible," said the source.

He added that the committee was expected to complete a report by the end of the month, in time for next month's board meeting, when a decision could be made.

The proposal was informally discussed at the recent board meeting, and the TOT management had indicated that the project appeared feasible, said the source, adding

that if Bell was allowed to launch the project, called Telestar, the TOT would have to seek changes in the Telephone Act, which does not allow the private sector to participate in telecommunications services.

The board would have to propose to the Communications Ministry amendments which would allow the private sector to develop a telephone network on a concession basis.

PROPOSAL

The Bell proposal called for the setting up of a company, also called Telestar, in which the TOT would hold a share equity. The size of each partner's share equity would be negotiated.

Telestar would pay the TOT concession fees amounting to about US\$100 million in the first 12 years of operation, but the amount varies as Bell has also offered eight or 10-year concession periods. Once the term was completed, all equipment and facilities would be transferred to the local authorities.

Telestar would also absorb any revenue losses,

besides compensating the TOT and the Communications Authority of Thailand (CAT) for any costs incurred.

The source said Telestar would set up its own telephone network, including cables and exchanges, in Bangkok and other major cities, which would be a separate system from TOT's existing network. It would also provide telex services and the use of high technology telecommunications network via satellite.

The network would be linked with the existing network, with Telestar paying all linking costs incurred.

The company would be concentrating its services on business circles, with flat fees — users would be charged about 2,200 baht a month for local calls irrespective of the number of calls made.

Overseas calls would be charged separately and the Bell proposal gives TOT charge of setting charges and collecting

iees.

"Approval would mean the provision of a full range of high-technological telecommunications services," said the source.

He said phone installations would cost about 75% more than at present but it would take only a few weeks.

"At present, we do not know the exact number of exchanges or telephone lines to be provided but a study is being conducted to determine the most feasible number."

In an earlier interview, Bell (Canada) International president Pierre Dupont said such a project would benefit everyone—the users, TOT, CAT and the local private sector.

WEAKNESSES IN SOFIA TELEPHONE SYSTEM EXAMINED

Sofia TEKHNICHESKO DELO in Bulgarian 30 Jun 84 pp 1, 4

[Article by engineer Yordan Stoichkov, chief specialist at the Sofia People's Council: "Telephone Question Marks: Problems in the Capital's Communication Services"]

[Text] The communication network in the capital is being expanded at accelerated rates, according to the comprehensive program adopted for communications development. During the last 6-7 years, the capacity of the capital's telephone exchange has doubled, reaching a telephone density of 38.66 per hundred residents. During the first 3 years of the Eighth 5-Year Plan, more than 67,000 telephones alone have been installed. More residents of the capital are able to dial directly to all of Europe and even to Kuwait. Two years ago a modern electronic telegraph exchange was put into operation, and it improved the quality of service (its operation is monitored and controlled by computer).

The Sofia People's Council anticipates that in 1984 production—technical buildings for automatic telephone exchanges will be completed at the following residential complexes: Krasna Polyana, Druzhba, Khadilnika, Lozenets, and Voeno Uchilishte. The construction of similar buildings is scheduled for the Nadezhda, Mladost—IV, Chervena Zvezda, and Bankya city complexes. During the Ninth 5—Year Plan, construction will also include the Obelya II, Ovcha Kupel, Manastirski Livadi, Malinova Dolina, and Levski II complexes. This will be the production base for communications development by the year 1990, and the precondition for expanding the capacity of the city telephone exchange in order to satisfy the needs of more than 90 percent of Sofia. In addition to the production—technical buildings, the Sofia People's Council and the Main Economic Statistics Directorate foresee the construction of telephone channel networks in new residential complexes and the reconstruction of existing communication equipment.

The existence of many unanswered requests for telephones shows, however, that what has been achieved is far from being enough. Furthermore, satisfying the needs of the populace in the Seventh, Eighth, and Ninth Rayon People's Councils is worse than the average in the capital, and the Mladost IV and Nadezhda IV complexes are not yet connected to a telephone exchange. The quality of telephone services does not satisfy the requirements either. There are different

reasons for that; among them the following stand out as the most important:

--Outdated switching equipment with low operating reliability and a high degree of manual labor. It is also characterized by inefficient technology of operation, which is not easily optimized. Evidently, a positive outcome could be achieved by replacing it with better digital switching equipment; the Ministry of Communication is diligently working on this matter.

--An insufficient amount of annual repair on the switching equipment, as well as the cable network. The telephone exchange and cables installed 3-4 decades ago, whose active-use warranty has expired already, intensive loading of some exchanges within the central city district, and low reliability of some cables due to technological reasons, all require the amount of existing annual repair to be increased and the quality of its effectiveness be improved.

--Implementation of scientific-technical progress. Much indeed has been done in this respect. It would be enough merely to say that 2 years ago massive adoption of apparatuses for automated testing of switching equipment was begun, and by 1985 this will be done on all larger telephone exchanges (over 5,000 telephones). During the last year an apparatus for testing the cable network was tried out, and it will be implemented starting this year. More than 200 kilometers of connecting and main trunk line cables are under automated pneumatic control; if all this is compared to what has been achieved in leading countries, however, the results could not satisfy us, either in terms of the amounts or the schedules for fulfillment.

--Insufficient operating reliability of the cable network already installed, because of lack of protection from damage during new construction and reconstruction of main trunk lines, buildings, and other sites. Beginning this year, there is under way the successful application of new "Instructions for Establishing Cadastral Plans for Underground Cables and Equipment, Coordination and Control of Low-level Construction in the Process of Design, Construction, and Maintenance on the Territory of the Sofia People's Council." As can be seen, practical results are still expected.

--Operation of office telephone exchanges (OTE's). Due to the historical context, operating the OTE's is difficult and complex -- the equipment is administrative and only one-third of the exchanges are supported by the offices of the Ministry of Communication (usually the rest are handled by in-house cadres, most of whom do not have the necessary training). By adding the poor technological discipline of the administrative telephone operators and understaffing (which is below the norm) to this, the difficulties become clear. Things have also become more difficult because of the organization which has been created for periodic enlargement of the cable network, and on account of this the OTE's have lines which have become overloaded in the course of several years. It is necessary to raise the standards for good technical operation of the OTE's, no matter whose property they are. At the present stage, however, this is enforced by exchanging peremptory correspondence, and the most authoritative sanction, i.e., unhooking a malfunctioning OTE, would actually

create more trouble in the lines than if allowed to continue in operation, even with low quality. The operating service should be prepared, in the event of unplugging malfunctioning equipment, to substitute an automatic operator supplied with the necessary information for this purpose. The same is also true in relation to the telephone numbers of service-oriented offices, or those with heavy operation rates, which for one reason or another (repair, reorganization, or others) do not answer a call.

One of the main prerequisites for modernizing the engineering systems, including communications here, is that a unified collector system should be built in order to ensure high operating reliability and prevent constant digging around the capital. The establishment of installation collectors in the capital goes back to 1950, with the first half-kilometer duct collector on G. Dimitrov Boulevard. In 30 years, 83 collectors have been built with a total length of over 40 kilometers, and during the Eight 5-Year Plan 20 more are expected to be built, with a total length of 47 kilometers. The experience of leading countries such as the USSR, East Germany and others is being used in this respect. The installation collectors, which were put into operation in 1981, are modern equipment built with combined elements. They have ventilation systems, dispatcher points for remote control and operation of the servicing systems. In order to preserve the existing landscape or sectors with specific purposes, a tunnel building of installation collectors is used in such instances. At the present time, the tunnel method is being used for building the main heating duct for the Lozenets residential complex. Similarly, a collector is foreseen for the construction of the mainline cables along Botevgrad Highway. With the acquisition of new territories for residential construction, we passed over to a new form of complex construction of the technical infrastructure: duct intraresidential collectors, which bring the engineering equipment to the consumer -- the apartment block. A novelty in our practice is the construction of a collector system at the Malinova Voda apartment block, which passes through the buildings and implements the so-called corridor collectors.

The more efficient operational technologies which have been introduced, as well as the adoption of the most modern electronic digital switching systems, will, generally speaking, resolve the problems of quality. But that was the goal of yesterday. We cannot be satisfied with it today, because scientific and technical progress opens up new horizons. The most functional possibilities of the new switching centers will not permit us to be satisfied with only an ordinary high-quality telephone connection. Many administrative functions and domestic conveniences will be transferred to telephone centers. In addition, the necessity of exchanging a large volume of information requires implementing high-speed systems, and the traffic capacity of the telephone lines will be increased manifold. All of this outlines the scientific and technical dynamics facing communications in the capital for the next decade.

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CAMPINAS FIRM INITIATES PRODUCTION OF FIBER OPTICS

Sao Paulo FOLHA DE SAO PAULO in Portuguese 4 Jul 84 p 35

[Article by Graca Caldas]

[Text] Campinas--Brazil is definitely entering a new era in telecommunications systems with initiation of factory production of fiber optics. These fibers are being produced in the factory of ABC-X-Tal, in Campinas. The first order of 500 kilometers of fiber will be delivered to TELEBRAS [Brazilian Telecommunications, Inc.] next month.

ABC-X-Tal is part of the ABC Electronic Systems—the holding company—group of Minas Gerais, whose capital is entirely Brazilian. The Campinas factory, which is located next to the TELEBRAS Research and Development Center, near the Mogi Mirim highway, is to be inaugurated officially with the presence of the president of the republic on a date not yet set.

This is the first factory in the Southern Hemisphere to produce fiber optics on an industrial scale, according to the firm's technical director, Jose Mauro Leal Costa, a mechanical engineer with a doctorate in physics. The planned initial average annual production is 1,500 kilometers of fiber optics for a protected domestic market guaranteed for 5 years.

The successful domestic production of fiber optics under conditions similar to those in developed countries is due, according to Leal Costa, to the unprecedented combination of three factors in Brazil's latest technology: the beginning of academic research in the State University of Campinas; TELEBRAS support and continuation of the research studies at its research center, CPqD [Research and Development Center]; and current industrial support.

Jose Mauro, who obtained a doctorate in materials science in the United States, is one of the only three Brazilian researchers to work in glass science. He was present in the three phases of the project for fiber optics for telecommunications. Nine years were spent in research and training of the specialists who now make up the working group of ABC-X-Tal, under the direction of three professors: Antonio Carlos de Campos, Mauro Biscaro Elias and Jose Flavio de Freitas, all graduates of UNICAMP [Campinas State University].

ABC-X-Tal of Campinas is an affiliate of the main Rio de Janeiro firm created in 1973 and which since then has been making quartz oscillating crystals for television sets, microprocessors, video games and various other electronic circuits. Since September of last year, when it was the successful bidder for the manufacture of fiber optics and was given a protected market for 5 years, ABC-X-Tal has invested about 2 billion cruzeiros in its Campinas affiliate. About 70 percent of this investment is for equipment, 70 percent of which, in turn, is imported.

Promising Market

Located on a total area of 20,000 square meters, of which 1,500 square meters have been constructed, the factory's rated production capacity is 3,000 kilometers of fiber optic per year. Besides the contract with TELEBRAS, meetings are being held with other companies interested in production of fiber optics, whose application is not restricted to the telecommunications sector.

The international market for fiber optics has grown exponentially. In 1980, demand (excluding the United States, which holds 50 percent of the market) was \$600 million. The estimate for 1990 is \$3.2 billion. And, for 1995, \$10 billion. In Brazil, according to Leal Costa, demand is also expected to grownexponentially, although more slowly than abroad.

According to the technical director of the Campinas plant of ABC-X-Tal, there is a large pent-up demand in Brazil. This is because there are now only 9 million telephones for a population of 130 million. The expansion of the telephone system is likely to occur with gradual transfer of the conventional cable system to fiber optics. This new system greatly increases transmission capacity and TELEBRAS intends to instill it nationwide.

Advantages

The advantages of changing from the conventional system to that of fiber optics are several. Installation cost is potentially cheaper. Copper used in making conventional cable is increasingly more expensive and more scarce, whereas quartz (the basic raw material) for producing fiber optics is found in abundance in Brazil, which has the world's largest reserve of it.

With the use of fiber optics, whose thickness is equal to that of a hair, it is possible to hold at least 1,000 telephone conversations. In the conventional system this capacity is limited to 30 conversations. Moreover, there is no possibility of getting diaphony (crossed lines), very common in the conventional system. Nor do fiber optics pick up physical interference from noise sources.

Expansion

The change in the telecommunications system from cable to fiber optics will also permit a rapid expansion in other communications systems, such as computers, telex, videotexts and cable television, without any interference with the existing telephone system.

Although it has ample technology in fiber optics, Brazil will continue to import from the German Heraeus firm the quartz tube used for the system's operation. This tube is made in Germany with Brazilian quartz. However, this importation, according to the ABC-X-Tal technical director, does not represent a problem for domestic production. This is because the same procedure is adopted in other countries that produce fiber optics. The quartz tube is one of the three basic imputs for producing the fibers, besides liquid chlorides and silicone, the latter also imported.

The cost of the quartz tube, however, represents only 4 percent of the total cost of the fiber optic and the other imported inputs are used in such small quantities that they have no influence on the cost of the final product. In Leal Costa's opinion, although it would be desirable for the nation to make these inputs, it does not represent a priority at the moment as mastery of the technology for the tubes would require from 20 to 30 years of research for its application in telecommunications.

Since 1982, 3.2 kilometers of fiber optics connecting the telephone switchboards of Jacarepagua and Cidade de Deus have been functioning in Rio de Janeiro. With the operation of this system without any problems during this period and with the beginning of manufacturing in Campinas, the next state to install the new system is likely to be Sao Paulo, followed by the nation's other urban centers, where the conventional telephone system is saturated.

8834

SEI HEAD VIEWS FOREIGN TECHNOLOGY NEED, INFORMATICS LAW

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 18 Jul 84 p 23

[Text] Rio de Janeiro--The Brazilian Government may set up a company abroad to facilitate the search for technlogical knowledge needed to consolidate its informatics industry, it was announced at the War College yesterday by Commandant Edison Dytz, special secretary for informatics. "That we need technology in this area is undeniable, and the flow of technology from abroad is essential." He added that Brazil must have "one foot abroad" to learn how to train and attract highly qualified manpower, "but this picture will only take real form when there are legislation and incentives for domestic industry."

The field of informatics, according to the secretary, will be kept within the scope of the National Security Council and the Office of the President in the bill to be sent to the National Congress at the beginning of the next legislative session, probably in August. The bill, according to the chief of the Special Secretariat of Informatics [SEI], contemplates creation of a commission to be subordinated to the SEI. But he objected to classification of the sector as "of interest to national security," arguing that "it is not correct to classify informatics entirely within the national security area because, although it comes under the National Security Council, it doesn't 'wear a security hat,' because it now involves many more sectors of a civilian nature, such as banking automation, education, agriculture and so forth."

At the conference for students of the War College, the special secretary for informatics said he had taken a few "kicks in the shins," referring to the criticism leveled at him by some sectors of the government in the economic area and in the Ministry of Communications, which he says are being overcome.

He emphasized Brazil's possibilities in digital computers, which will also depend upon the search for technological knowledge to reduce the gap between what the nation will be able to plan and what it will need in the future. In terms of market prospects, Commandant Dytz gave the example of offers made to a domestic firm, Sid Components, which will be reopened on 19 July.

Bill

Edison Dytz said that the bill the government will submit to Congress "adheres to the philosophy that Brazilians will do what is possible, creates a commission which will be the sector's forum for discussion, gives the SEI the executive role it has been performing, and has a chapter on incentives, which we will be able to use in keeping with the specific projects that ask for privileges."

The commission will be attached to the National Security Council, will be responsible to the Office of the President, and the SEI will be responsible to the secretary general of the National Security Council. In regard to restricting the market, Dytz said that "within the framework that exists today, the bill preserves it, but leaves the matter open for the commission to decide in terms of the future."

The bill calls for transformation of the Informatics Technology Center (CTI) into a private foundation and, according to Dytz, "opens the CTI's doors to private interests and, if the latter declare themselves, turns it over to the private sector--not to a single company but to a group of Brazilian companies." The special secretary for informatics said that "it is in the interest of the government to open the CTI to private ownership."

Economic groups such as Itau and entities such as ABICOMP or FIESP [Sao Paulo State Federation of Industries] will be able to define, according to Dytz, the line of research pursued by the CTI, through its board of directors. The secretary further pointed out that the CTI will be associated directly with Brazilian universities in developing technological research.

"I no longer see the CTI as of interest to a single company, but rather to a group of companies that have a certain leadership in the sector. Its funding this year was 11 billion cruzeiros and next year it is likely to be about 40 billion cruzeiros," Commandant Dytz said.

8834

NATION PRODUCES FIRST TV SATELLITE RECEPTION ANTENNA

Santiago HOY in Spanish 18 Jul 84 p 51

[Article: "Direct to the Satellite"]

[Text] The enthusiasm of the engineers at the University of Chile's Space Studies Center is like that of children with a new toy; and perhaps greater, because the "toy" was made by them, "with local ingenuity and ability," as HOY was told by Eduardo Diaz, director of the center.

It is an enormous fixed antenna receiving television signals via satellite; an odd structure made of crosswise iron sections measuring 7.5 meters per side (it appears to be square, but is called "spherical"), with special focuses in front, capable of concentrating the energy coming from the satellite and making the signals bounce on a focal point.

It is certainly not a contrivance resulting from the imagination of Brain Williamoz, who devoted himself to thinking up the antenna; because this type of structure is already being built in the developed countries, on a mass scale. It is, rather, a national design, "using all the features that are obtained from the satellite," as the expert explained. And the nice part about it is that it is being made for the first time in Chile.

A Viable Concept

So, what began at the end of last year as a mere "engineering exercise," in the view of Eduardo Diaz, brought results when suddenly, "they hit upon a satellite," and the pictures from Brazilian, Argentine, Venezuelan, Colombian and Peruvian programs reached the screen of a television set (also adapted by them).

The importance of having an antenna of this "made in Chile" type means not only "that we have proven to ourselves that the concept was viable," but also that it can be manufactured in the country, with native professionals and materials. Diaz claims: "We are competitive in quality, but in prices we don't know." What is lacking, they admit, is experience. Diaz added: "And if we do not have a chance to prove our ability, we shall never have it."

For this reason, the Space Studies Center decided to respond to the call for bidding on a system such as this made by National Television. Diaz recounts: "They have the plan to establish a satellite system to replace their microwave system in the country." They have had large numbers of bids from foreign companies, as well as that from the center, and the they must make the decision soon. The center's engineers are skeptical about their being chosen ("for lack of experience"), although they trust that TVN may, on the other hand, favor a Chilean initiative; particularly if one considers the fact that it contributed some of the financing precisely for the development of that antenna.

The microwave systems are expensive and have the drawback of not being able to reach certain locations, such as the islands or corners of the country isolated by hills. The satellite, on the other hand, makes it possible for the signal to reach everywhere, without distinction, provided the antenna has the capacity for geometric precision (which affords a clarity of image), and low noise amplifiers, which do not interfere with the signal. The newly created antenna has both features.

For Leasing

The specialists note that an antenna of this type is the "extension of the television studio ready to be transmitted." The manner of achieving this is to lease from Intelsat (International Organization for Satellite Telecommunications, of which Chile is a member) one of its satellites located over the Atlantic Ocean. There, Intelsat has about six satellites which it leases to make use of its "idle capacity." These communications satellites are situated 35,000 kilometers directly over the Equator, in the orbit known as geosynchronic, because they maintain their synchronism with earth within a particular band.

Unquestionably, building and launching a satellite is an enterprise that no developing country could consider undertaking. That is why leasing the satellites has proven to be the easiest method, and is economically within the reach of nearly all the countries in the world. And if each one achieves the necessary human and technical capacity for building the antennas which bring down the signals, it is even more economical.

Hence the confidence of the engineers from the University of Chile's Space Studies Center. But they think that if TVN decides on an option different from the one that they submitted, they still should be credited with "the merit of having engaged in studying this."

2909

CHILE

BRIEFS

CABLE TELEVISION AUTHORIZED—Through Decree No 49, the Transportation and Telecommunications Ministry has granted to the communications company INTERCOM an indefinite license to install and operate a cable television service in Santiago and the surrounding areas of Las Condes, Providencia, La Reina, Nunoa. The service will be rendered through a network of coaxial cables that will operate on the frequencies between 54 mhz and 300 mhz with a final capacity of up to 36 VHF channels, each with a 6 mhz-band width. INTERCOM has been authorized to start operating with 24 channels. The license excludes free-reception television signals. The National Television Council will supervise the service, which INTERCOM must start rendering within a period of 18 months from the date of the enactment of the decree. [Summary] [PY031744 Santiago EL MERCURIO in Spanish 14 Jun 84 p C 11]

BRIEFS

ANP TO REDUCE ACTIVITIES—The Dutch News Agency ANP intends to reduce its activities in the Netherlands Antilles. Among the steps to be taken will be an end to Dutch and English news bulletins in Aruba and Curacao and to news summaries in Papiamento. ANP management says these steps are necessary because of the sharp increase in losses suffered as a result of operations costs in the Netherlands Antilles. Consideration is also being given to the possibility of abolishing the line between Curacao, Saba, and St Martin. Arrangements have been made meanwhile to compensate the four employees who will lose their jobs as a result of the new measures. [Text] [FL201314 Hilversum International Service in English 1000 GMT 20 Jul 84]

URUGUAY

BRIEFS

ERICSSON PHONE SYSTEM FROM SWEDEN--Ericsson, after meeting tough competition from ITT and others, has taken home an order for its digital AXE system, which will be the foundation for improving of the telephone net in Uruguay. The competition for this order has been going on for three years. Ericsson has now entered discussions to work out the order in detail. It involves around 200,000 local lines, an international and national transit exchange, transmission equipment and a computer-controlled operations and maintenance center. [Text] Stockholm DAGENS NYHETER in Swedish 28 Jul 84 p 11]

BAHRAIN

BRIEFS

GULF SUBMARINE CABLE--THE FINAL certificate of acceptance of the Bahraini part of the Gulf submarine cable linking Bahrain, Qatar and the UAE was signed in Batelco's offices. The certificate was signed by Mr Rupert Thorogood, Batelco's chief engineer and acting general manager, and Mr Yasunari Suzuki for Fujitsu Lts, the main contractor for the project which has cost the three states a total of \$47 million. Also present at the ceremony from Batelco were Mr Henry Godfrey, engineering manager transmission and Mr Abbas Hassan, Gulf cable Bahrain co-ordinator. Mr Y Ohsugi from Fujitsu was also present. [Text] [Manama GULF MIRROR in English 14-20 Jun 84 p 18]

MINISTER DETAILS TV EXPANSION PLAN FOR NORTHEAST

New Delhi PATRIOT in Enlgish 30 Jun 84 p 5

[Text]

A massive plan for expansion of TV in the north-east region approved by the Government at an outlay of Rs 36.5 crore has been drawn up, Minister of State for Information and Broadcasting H K L Bhagat, has said, reports PTI.

The Minister told a meeting of the consultative committee of MP's attached to his Ministry in New Delhi on Thursday, that an estimated 85 per cent of the region's population was expected to be covered under this scheme.

Mr Bhagat said that this expansion plan envisaged the establishment of 10 kw TV transmitters with programme production facilities at Silcha. Tura and Dibrugarh and one kw TV transmitters with programme production facilities at Shillong, Kohima, Imphal, Itanagarand Aizawl.

He said that low power transmitters at Dimapur, Passighat, Jorhat, Teju and Dipu would also be installed.

The Minister announced that a colour programme production and feeding centre would also be set up at Guwahati and an up link would be provided there to link all relay centres in the north east to the programme feeding centre via INSAT 1B. This will enable relay of programmes common to the northeast region.

Mr Bhagat told the committee that low power transmitters at Dibrugarh and Tezpur in Assam and at Tura in Meghalaya were likely to be installed by the end of Septempter. These centres were expected to be commissioned by October.

Regarding existing TV services in the north-east region, he said low power transmitters at Guwahati

Shillong, Kohima, Imphal, Itanagar, Agartala and Aizawl, set up in November 1982, were already functioning in the region.

The Minister said a full-fledged TV centre at Guwahati with a 10 kw TV transmitter and studio facilities was under implementation as an approved Sixth Plan project.

Mr Bhagat also assured his Ministry's consultative committee members that the Government will ensure availability of newsprint in sufficient quantities so that growth of newspapers in the country is not restricted.

Replying to members, who expressed concern over the shortage of newsprint in the country, Mr Bhagat said it was not correct to say that the country was facing a serious shortage of newsprint. The newsprint situation was gradually becoming comfortable as a result of various measures initiated by the Government, he said.

He assured members that the Government was keen to prevent the newspaper industry from suffering due to newsprint shortage.

Mr Bhagat told the committee that two members from the industry had been associated with the newsprint price fixation committee.

The Minister said that the policy of newsprint allocation was need based and there would be no change in it.

Domestic production from the three mills at an average monthly rate of 15,000-16,000 tonnes plus the imported newsprint helped in meeting the requirement of newspapers to a considerable extent, he said.

Mr Bhagat said that STC had been asked to ensure import arrivals at the rate of 25,000 tonnes every month during the first half of 1984-85.

He said the requirement of newsprint for 1984-85 had been fixed at 3.85 lakh tonnes of which 1.85 lakh tonnes would be made by imports and the balance would be made available by domestic production.

The three domestic newsprint mills have been asked to make special efforts to achieve maximum production in the coming months.

Mr Bhagat told the committee that he had also written to the Chief Ministers of Madhya Pradesh, Karnataka and Kerala to make available adequate power supply to the newsprint mills in their States. The issue of adequate coal availability was taken up with the Ministry of Energy to ensure speedy movement of newsprint from the mills. The Ministry of Railways had also been approached, he added.

Replying to questions on sex and violence in films, Mr Bhagat said that instructions had been sent to the Central Board of Film Certification to strictly follow guidelines.

The Minister said it had been decided to show award winning films on Doordarshan to encourage good film makers.

The national film awards were decided by a national jury of professionals and people of high repute. The film "Adi Shankaracharya" was not against the secular spirit of the

Constitution, he said.

CSO: 5550/0024

DELHI GETS FIRST LOCAL ELECTRONIC EXCHANGE

New Delhi PATRIOT in English 27 Jun 84 p 3

[Text]

The Capital's first electronic local automatic telephone exchange was commissioned at Idgah on Tuesday by Minister for Communications V N Gadgil. Six more such exchanges are to be opened at Nehru Place. Karol Bagh, Sena Bhawan. Kidwai Bhawan, Tiz Hazari and Rajouri Garden in the course of the current year.

The advantages of these Stored Programme Controlled (SPC) exchanges were their reliability, quality of speech and the absence of noise and interference, the Minister said. They signified the progress being made in the field of telecommunications.

The Idgah exchange, the third of its kind in the country, was commissioned when the Minister placed a call to Lt. Governor P G Gavai, who presided over the function.

Communications Secretary K Thomas Kora said that the SPC system combined the reliability of electronic components with the speed of a computer. Switching was faster than the older electro-magnetic ones.

More than 50 per cent of the telephones to be installed in the country in 1984-85 would be connected to electronic-digital exchanges, the Communications Secretary said. About 40 lakh new connections are to be installed in the seventh Plan.

The installation of these exchanges marked the third phase in the modernisation of the telecommunications network and followed the electronic trunk automatic exchanges commissioned in 1983 and the electronic telex system early this year. Japanese assistance: The equipment for the Idgah electronic exchange has been imported from Japan. The total cost of the exchange is Rs 1113 lakhs. Out of this, the cost of the equipment alone comes to Rs 52 lakhs and that of cables Rs 514 lakhs. Different kind of telephones will also be required and two factories are to be set up for the purpose.

Financial assistance for the project has been provided by the Overseas Economic Cooperation Fund of Japan. This is part of the 38.5 billion yen credit that has been extended to India since

Certain special facilities can be provided to the subscribers through this system. For one, the exchange provides for abbreviated dialling where the subscriber will have to dial only two code digits even for STD calls.

Own hot-line: A subscriber will also be able to have his own hot-line. Malicious calls can be traced quickly as the callers number will be printed out automatically. Trunk calls can be shifted to other numbers and incoming calls can be "camped on". A tone will indicate to the receiver of a call that there is another caller on the line. The on-going conversation can be interrupted and then resumed by flipping a switch.

But to avail of these special facilities special phones will have to be installed. The Delhi Telecommunications are to fix a tariff at which these phones and the facilities can be availed of.

The system is also expected to facilitate installation of STD coin boxes. Mistakes in billing can be minimised as the call will be recorded automatically.

cso: 5550/0023

PRIVATE SECTOR'S POSSIBLE ROLE IN TELEPHONE INDUSTRY DISCUSSED

Karachi DAWN in English 14 Jul 84 Business Supplement p I

[Article by Shaheen Sehbai: "When Private Sector Is Shy, We Have no Option"]

[Text]

PAKISTAN is on the verge of handing over the entire development programme for the country's telephone services to one major international company and officials expect that Pakistani private sector will also associate itself with the scheme.

"World tenders for 60 per cent of the over half a million new lines envisaged in the Sixth Plan have already been called and the matter is in the final stages of decision as to which company should be given the job," a senior executive of the T&T told me.

"We are making a major decision about the type of telephone exchange equipment. The target of 520,000 lines for the Sixth Plan period will actually include over 300,000 line on digital exchanges. We have already tried, on experimental basis, some digital exchanges but now the entire system in the country will be made uniform — supplied, manufactured and installed by one company," Mr. Irshad Hassan, General Manager of Karachi Telecommunication region, said in an interview.

"The company which is chosen will come in for manufacturing the equipment locally. It will give us loans, provide us readymade equipment and may also be expected to join hands with private sector in taking over and running telephone exchanges," he explained.

Half-hearted

Mr. Hassan's disclosure follows half-hearted attempts by the government to attract the private sector into investing in telephone business which was not taken seriously by any investor for varying reasons.

Hints were thrown in the beginning that T&T was willing to sell six telephone exchanges to the private sector. Only one trade association; the SITE showed initial response but only to the extent of making enquiries.

"What the T&T were asking us was to invest our money, either in shape of suppliers' credits or by erecting telephone exchanges and handing it over to them. We are not investment companies or financial institutions," leader of the SITE team which held initial talks with T&T officials told me.

"We would have liked to know in what shape our involvement will improve the efficiency, the working and what returns will we get, whether we will have the right to hire and fire workers, how will private exchanges coordinate with government owned exchanges and a lot of such involved questions," the SITE spokeman said.

"What we got in answer was that only Islamabad can give you all these answers. And when we went to Islamabad, we were handed a proforma which included none of the replies. That is where the matter ended."

But Mr. Irshad Hassan maintains that the private sector has not understood the offer in its spirit and detail.

No expertise

"They do not have the expertise to take over the exchanges and start operations overnight. They don't even know, at this stage, what questions they should ask us. So our proposal that private sector should run the exchanges is actually meant to be implemented when enough know-how and expertise is developed by the private sector," he says.

The proposal, which officials, believe is the most suited at this stage, is to get international collaboration for developing telephone exchanges, according to specifications and designs already prepared by the T&T, and hand them over to the department for running.

"This will help them develop the required expertise, and will bring them windfall profits as well because on whatever we earn from these exchanges, no taxes will be deducted and thus the margin will be greater than any private enterprise," Mr. Hassan says.

terprise," Mr. Hassan says.

But SITE Association is not so sure about this prospect. "What we received in writing from them was that if we hand them over a readymade exchange, they will pay back the princial amount with interest on bank rates. So why should we not put our money in a bank if only it is the bank rate that we get in return," its chairman Mr. Haroon Siddiqui said.

PLS no doubt

The T&T has no doubts. "It is going to be a genuine share in the profits as now we can only deal in profits and loss system," Mr. Hassan argues.

He says there is not much which the private sector has to do in real terms. T&T has already built several exchange buildings in Karachi which cannot start functioning because no ADP provision has been made for the equipment. The private sector has just to order the machines, instal them and they have no problems of marketing as thousands of buyers are already lined up. They start getting the return immediately, according to whatever formula is agreed upon.

But the private sector remains unconvinced. "When they want to run the show themselves, with all the inherent inefficiency and corruption, how can we be expected just to give them money. If they want only money they can turn the T&T into a public limited company and float its shares and see how much is subscribed. They will get all the money they want," a spokesman retorted.

T&T is prepared to go a step further. "Let them come with any international company of repute which should bring its know-how and expertise to run such a system and we are prepared to sell them any exchange or a set of exchanges," Mr. Hassan says. "But how can we even discuss complete sale with operating rights as well when no one has such experience. The government has a commitment that it has to provide a service, an efficient service, and private sector cannot do it in isolation."

While the argument continues and little progress is visible on privatisation, the government is going ahead with its own scheme as envisaged in the Sixth Plan.

"We want Rs. 13 billion for telephones and Rs. 10 bn have been committed. The gap was expected to be filled by the private sector. But with time probably they will come in."

Incentives

The incentive, officials think, will come when the tenders for a uniform system are awarded. When manufacturing of equipment starts within the country and the main foreign collaborator is here with all the expertise and the money, then our entrepreneurs may also feel tempted to join hands and move in.

The blueprint for the major foreign hand envisages that the company which will provide the entire system will be run on the lines of the Telephone Industries of Pakistan (TIP) having its own manufacturing units and subsidiaries.

"The new company that will be launched will probably be in collaboration with the public sector," Mr. Irshad Hassan thinks. But this will provide the necessary funds which we required from the private sector.

Ball in court

What is actually required is an enormous bill of almost Rs. 10,000 for each existing line and about Rs. 25,000 for each new line. So millions are required even if negotiations for one exchange are carried out. And private sector does not, and will not, invest until it is 101 per cent sure of where the money is going and what it will bring.

"They have actually thrown the ball in our court just to prove us inefficient and incapable of accepting this challenge," a senior private sector spokesman remarked." They want to degrade us in public eyes."

ARABIC TELEX SERVICE BEING INTRODUCED

Karachi DAWN in English 14 Jul 84 p 3

[Text] ISLAMABAD, July 13: Pakistan Telegraph and Telephone Department has made arrangements for introducing Arabic telex service with the help of the Saudi Post, telegraph and telephone authorities.

According to a Press release issued here on Thursday, satisfactory tests have been conducted recently between Pakistan and Saudi Arabic. These arrangements have been made possible by the introduction of the multilingual teleprinter machine which can transmit and receive messages in Arabic, Urdu and English languages and are at present being manufactured at the Telephone Industries of Pakistan.

These machines meet the International Tele Communication Union's and Arab Telecommunication Union's standard specifications and are fully compatible to exchange telex traffic in Arabic, both from and to identical bilingual machines and purely Arabic language machines. Pakistan Telegraph and Telephone Department would be supplying these new teleprinter machines for public use also.

The new service at present is exclusively meant for the telex subscribers only and not for the telex PCOS.

This service is specially beneficial for the foreign missions, importers/ exporters and recruiting agencies. At subsequent stages, the new services intended to be introduced with other Arabic speaking countries also.

Interested parties were advised to apply to the respective General Manager, Telephone, of their region for availing this new facility. a list of all English, Arabic bilingual telex subscribers will then be prepared and forwarded to the Saudi telex headquarters in Saudi Arabia for their information.

AFRIKANER DOMINATION OF SABC BOARD NOTED

Capetown THE CAPE TIMES in English 16 Jul 84 p 8

[Editorial: "Ethnic Domination"]

[Text]

HE board of governors of the ■ South African Broadcasting Corporation has at length replied to the column by James McClurg on this page which drew attention to the Afrikaans language group's overwhelming predominance in key posts in the Corporation. As reported on Friday, the SABC's response was to assert that the home language of an applicant for appointment or promotion did not normally play any role when a selection was made. However, there were some appointments in which a particular home language was either desirable or essential. True enough. The latter point may be conceded without argument. As to the SABC's espousal of the principle of merit rather than language as a criterion in all other cases, it is heartening that the Corporation is prepared to commit itself to the principle in this forthright fashion.

What happens in practice, regrettably, is another story. The

Corporation's reply does not contest the facts and figures cited by James McClurg which may therefore be taken as correct. And the fact remains that only one in 10 members of the executive committee of the SABC is English-speaking - and the individual concerned is involved in technical matters rather than broadcasting policy. The facts are plain enough. The SABC is an Afrikaner-dominated organization, in spite of its charter, strongly dedicated in practice to the promotion of the interests of the Afrikaans language group, first and foremost. The imbalance is patent in everything the SABC does — and is glaringly evident in its senior appointments. Is it seriously suggested that the Afrikaansspeaking section has a monopoly of the managements skills required in broadcasting administration? It is time that the SABC matched its daily practice with the principles it claims to uphold.

cso: 5500/93

MOVES BY SABC TO BLOCK BOP-TV SIGNALS HIT

Sophisticated Aerial

Johannesburg SOWETAN in English 23 Jul 84 p 9

[Text]

MOVES by the SABC to block Bop-TV signals to white areas seem set to blow up in its face.

This week viewers' resentment turned to hope with the news that an electronics company would soon be marketing a sophisticated aerial to enable viewers to improve the Bop-TV colour signal.

A Sunday newspaper mini-survey this week indicated that the vast majority of people who could pick up both SABC and Bop-TV signals preferred the service being beamed from the homeland.

But viewers have watched with dismay recently as their Bop-TV signal has diminished drastically.

Bop-TV spokesmen immediately laid the blame

on the SABC. "It appears that the SABC is trimming the signal to spillage areas, slowly but surely," said the head of engineering, Mr Allan Stonebank.

The SABC responded by saying that the diminishing signal was due to work they had been doing on strengthening the signal to Bop-TV target areas. A result of this might be the weakening of signals to spillover areas.

"We don't worry about the spillover area. If our tests show the signal is too weak in the target areas we must adjust it," a spokesman said.

Block

However, a Johannesburg radio technician told newspapers this week he had received information from a SABC employee that screens were erected around the transmission aerial which deprived specific areas of the Bop-TV signal.

Bop-TV is transmitted from Mmabatho to the Brixton Tower and the signal is then relayed to target areas.

The newspaper reporters spoke to another radio technician who said the screening method was the easiest way of blocking signals.

The diminishing signal did little to endear Bop-TV viewers to the SABC.

Newspaper letter pages were filled with complaints and people spoken to were unanimously critical of the giant corporation.

Editorial Comment on Situation

Johannesburg SOWETAN in English 23 Jul 84 p 4

[Editorial]

[Text]

IT is rather funny to see how Johannesburg and Reef whites are trying to have their piece of cake and eat it.

We are referring to the anger expressed by these people in the comfort of their political and material lives, at the apparent attempts by the SABC to block TV-Bop signals from white viewers. Suburban Johannesburg residents interviewed by a daily last week said they wanted the Bop-TV signal back — adding they preferred Bop-TV's programmes to those of the SABC-TV.

Some said the SABC is doing itself a disservice as it needed competition; others said all their children watched Bop-TV, while a majority said they preferred the homeland's service to the home product.

It is all in all a sad reflection at the double standards we tend to display. When the white electorate voted in strait-jacket governments time after time, they must have known what they were getting themselves into. After all the same Calvinists, who censor their literature, who refuse them leisure on Sundays, and feed them a staple of Victorian fare on television, also defends their white privilege.

It is this government that created the homelands so that the edicts of apartheid, that make life supremely confortable for whites, could be protected. It is thus the height of irony that they should be bleating at their own instructions. They cannot have this cake and eat it too.

A country deserves the type of government is has. While we are about it, we are also uncomfortable by the thousands of black South Africans who are eagerly lapping up all the "good" things from a homeland they also freely attack. We black South Africans also cannot have our cake and eat it. We cannot be comfortable about visiting Sun City, cheerfully listening to Radio-Bop and TV-Bop while at the same time castigating the system responsible for these facilities.

Ultimately, the argument that is advanced that some people do: not recognise Bophuthatswana as a separate state simply does not hold water.

It is broadly speaking true that South Africans who have a pride in the unitary state they believe in, do not recognise these balkanised states. They believe Bophuthatswana and all the other so-called homelands are artificial political entities, which are the result of warped political ideology.

This does not mean that South Africans who have voted the present government in and are presumably still benefitting from its power, can now castigate its products at the expense of something that they had a hand in creating. If they need to be consistent, they should leave Bop-TV to the Tswanas, who have legitimised Bophuthatswana as a country.

FEARS OF EMERGING SABC 'BROEDERBOND' VOICED

Johannesburg THE STAR in English 9 Jul 84 p 8

[Article by Gary van Staden]

[Text]

A "new broederbond" is emerging at the SABC, determined to curb radio and television programmes which are embarrassing to the Government, sources within the organisation claimed today.

And it has a plan to hijack prime time television for propaganda purposes, the

sources say.

This emerged after last week's announcement that the SABC was to bring radio and television actuality programmes under the control of the news department headed by a Director of Public Affairs.

The announcement caused concern among certain SABC staffers who threatened to resign if the new system further compromised their already limited editori-

al independence.

The Directorate of Public Affairs portfolio will be headed by Mr Kobus Hamman, former SABC news editor-in-chief, whose appointment was announced at the weekend.

The SABC confirmed that some people were unhappy, but denied that the new directorate was designed to tighten up political control of SABC services.

Mr Hamman was quoted as saying his

task had nothing to do with politics.

But SABC sources said today SABC chiefs were "near paranoid" about the possibility of magazine and documentary programmes becoming an embarrassment to the Government.

The new SABC "broederbond", which emerged after Dr Andries Treurnicht had left the old one a shadow of its former self, was determined to curb what it saw as too much adverse publicity for the Government, the sources claimed.

The prime offenders were radio programmes with a tradition of independence.

Sources claimed that certain subjects were taboo and that permission has been refused in the past to do programmes critical of the Government, the Security Forces or Pretoria's internal policies.

Among the subjects considered embarrassing were: those dealing with abuses of power by the police, Defence Force and Security Police; those dealing with removals; those attacking the Government's economic policies, and negative programmes about the independent homelands.

Last week the SABC said the new Directorate of Public Affairs was a managerial exercise, and not a political one.

cso: 5500/93

BOP-TV BLACKOUT ANGERS HUNDREDS

Johannesburg RAND DAILY MAIL in English 16 Jul 84 p 1

[Text]

HUNDREDS — perhaps thousands — of irate viewers have been unable to pick up Bop-TV since Friday evening.

Yesterday station officials said "a technical problem" had arisen, while SABC spokesmen said they had warned that spillage of Bop-TV to areas outside Soweto and Thaba Nchu could not be guaranteed.

Viewers in Randparkridge, Roodepoort, Windsor, Randburg, Emmar-

poort, Windsor, Randburg, Emmar-entia, Victory Park, Linden and Bryanston as well as Sunny ridge, in Germiston, have been unable to tune into Bop-TV since Fri-

day.
Mr Jack Goldberg, of Bordeaux,
Randburg, said he and his family had
enjoyed a faultless Bop-TV reception for the past six months, but it had suddenly come to an abrupt halt on

Friday evening.
"It all boils down to politics," he

said.
"It is true that Bop-TV is not as good as SABC as far as timing and presentation is concerned, but some of the programmes are definitely su-perior," he said.

There are more than one million

Batswana in South Africa and transmissions were planned to reach the places where most of them live —
Soweto and the Thaba Nchu area
A spokesman for Bop-TV said yes-

terday that they were busy working on the "problem". He declined further comment.

In a statement issued by the SABC yesterday it said the agreement be-tween Bop-TV and the SABC bound the corporation to relay Bop-TV's signal to certain target areas, in this

case Soweto and Kasigo.

The Director-General of the SABC, Mr Riaan Eksteen, had previously warned the public to be careful when laying out large suns of money on receiving equipment in spillage areas because spillage could not be guaranteed.

guaranteed.

The SABC had also previously announced it was working on refining Bop-TV's signal to the target areas. It was under no obligation to provide a service to other areas, it said.

The Director of Public Affairs for the SABC, Mr Hein Jordaan, said the SABC was continually looking to im-

SABC was continually looking to improve the signals to the target areas and if it affected the spillover areas it could not be helped."

FEWER PEOPLE WATCH TV1

Johannesburg RAND DAILY MAIL in English 21 Jun 84 p 5

[Article by J. Manuel Correia]

[Text]

AFTER having reached saturation point, TV1 is beginning to lose viewers of all races every day of the week, ac-cording to the All Media and Products Survey (Amps) for the first quarter of this year. The only gain has been in coloured viewers on week-

davs.

While the SABC is quick to point out that its total viewership is in the millions, it is quite clear to observers that Auckland Park cannot be too pleased with the drop.

Following are the figures for TV1 for the first quarter of this year, with the last quarter of last year in brackets.

● Mondays to Fridays: Whites 2 608 000 (2 644 000), coloureds 816 000 (797 000), Asians 354 000 (369 000) blacks 704 000 (888 000).

Whites Saturdays: (2 638 000), 2 633 000 coloureds 814 000 (830 000), Asians 357 000 (880 000), blacks 866 000 (1 007 000).

acks buy v-.

● Sundays: Willow(2 102 000), 2 034 000 (2 102 000), coloureds 611 000 (664 000), Asians 229 000 (274 000), blacks 539 000 (664 000).

Bop-TV, in its first three months on the air, had 262 000 viewers of all races — 50 000 of them white — on week-

of them white - on week-

days. On Saturdays it had a total viewership of 273 000 - 56 000 white - and on Sundays at total viewership of 230 000 — 47 000 of it white.

These figures, way above Bop-TV expectations are expected to double by the time the next survey is available. More than 100 000 TV aer-

ials have been sold to whites alone. At two viewers an aerial this means 200 000 whites.

TV2 and TV3 had a total audience of 2 691 000 on weekdays - 56 000 of it white — and only a combnined viewership of 1893 000 on Saturdays and 1769 000 on Sundays.

White viewership ov TV2 and TV3 on Saturdays was 77 000 and on Sundays 95 000.

While Bop-TV, statistically, may not have made a big dent in overall SABC viewership figures, it is easily the most popular entertainment station in Soweto. And, strictly speaking, it's regional, not national.

And the question could le-gitimately be posed: where have TV1's lost viewers gone

STEREO FM may well help Radio 5. If it doesn't, the station will still keep on shedding listeners to Music Radio

The All Media and Products Survey (Amps) for the first quarter of this year shows that on weekdays Ra-dio 5 had a listenership of 228 000 whites compared with 702's 343 000.

On Saturdays Radio 5 had 216 000 whites and 702 had 293 000. On Sundays 702's gain was even more dramatic - 271 000 whites to Radio 5's 161 000.

Listenership of all races for Radio 5 on weekdays was 358 000 and 702's was 386 000.

On Saturdays Radio 5's was 341 000 and 702's was 326 000.

On Sunday Radio 5 was also higher with 328 000 to 702's 300 000.

Yet the statistics must be galling to Auckland Park be-cause Radio 5 is national and 702 is regional.

Springbok Radio again easily outshone every station in the SABC stable.

LESOTHO TV SPILLAGE NO PROBLEM FOR SABC

Johannesburg RAND DAILY MAIL in English 25 Jun 84 p 5

[Article by J. Manuel Correia]

[Text]

THE SABC will take no steps to mop up spillage by Lesotho TV but is certain to insist that the mountain kingdom adheres to international agreements on spillage, informed sources said yesterday.

A Johannesburg Sunday newspaper reported yesterday that Lesotho's new commercial service would start in 1986 or 1987 and that border towns such as Ficksburg, Clocolan, Ladybrand and Wepener would get the spillage loud and clear.

With sophisticated aerial equipment the signal could possibly be picked up in Bloemfontein, the Free State Gold Fields, Maritzburg and Newcastle, depending on the location of the transmitter.

Lesotho is an independent state and a member of the Commonwealth and will be able to screen programmes denied to the SABC by the Equity ban.

Observers believe Lesotho

Observers believe Lesotho will have to adhere to inter-

national spillage agreements.

If it does not do so it might have difficulty in getting help from South Africa should it want to transmit to its thousands of citizens living and working on the Reef.

The attitude of the SABC is that accepted spillage in the border towns will not be interfered with but that reception further afield could be construed as beaming, which was unacceptable.

One thing emerged yesterday. The SABC does not perceive Lesotho TV as a threat, just as it does not see Swazi TV spillage as a threat.

It has not attempted to mop up Swazi TV spillage into the Eastern Transvaal or Natal and is unlikely to do

Although the latest All Media and Product Survey (AMPS) showed SABC losing viewers every day of the week in the first quarter of this year — it gained only coloured viewers on weekdays — the SABC has told the Mail the figures reflected the period before its major programme rejig and that it would regain lost viewers.

CUBAN NEWS AGENCY HEAD ON CHALLENGE TO NEWS MONOPOLIES

Moscow SOVETSKAYA ROSSIYA in Russian 19 Jun 84 p 3

[Article by Gustavo Robrenio Dols, general director of the Prensa Latina Agency: "The Challenge to the 'Word Monopolies'"]

[Text] The idea of creating our information agency appeared in 1958, when a correspondent of the Argentinian radio station El Mundo, Jorge Ricardo Masseti, met Fidel Castro in the mountains of Sierra-Maestra. This idea acquired new support during the operation "Pravda" at the international meeting of journalists in Havana. More than 400 representatives of the means of mass information from all over the world participated in it; they wanted to find out about the true state of affairs on the revolutionary island of Cuba.

On 16 June 1959 on the air and on the telex communications channels, the voice of Prensa Latina sounded for the first time. The first broadcasts of this independent information agency became a real "challenge" to the "word monopolies" in the United States which, in the interests of their masters, distorted or silenced the real events in Cuba and in other countries of Latin America, as well as in the whole world.

From the very first working day under the leadership of Jorge Ricardo Masseti, the new agency spread the news in the best traditions of Latin American revolutionary journalism. First, Prensa Latina had its correspondents in 18 countries on the continent. They did not have them in Nicaragua, the Dominican Republic and Haiti—in the countries where reactionary dictatorships were then governing. However, within a few months, due to U.S. pressure, the bureaus of Prensa Latina were closed in Washington and in 15 Latin American countries. They continued to operate only in Mexico, Chile and Uruguay.

In order to withstand the persecution and provocations from the United States, the agency broadened the scope of its activity. In May 1960, a bureau of Prensa Latina opened in Prague, a little later—in Moscow, and then, in the remaining capitals of the European socialist countries.

Now we have agreements on collaboration regarding the exchange of information with 78 foreign agencies. Prensa Latina is one of the founders of the non-aligned countries' information agencies Pool; it also belongs to the Association of the National Information System of Latin America.

Prensa Latina has bureaus in 37 countries. Ten years ago, the agency utilized 12 international and 2 national communication channels, broadcasting 5,500 broadcasts daily. Currently, Prensa Latina has 27 international and 5 national channels, and broadcasts 7,800 broadcasts daily in Spanish, English, French and Portuguese.

We utilize two satellite systems: Intersputnik and Intersan. In addition to the daily information broadcasts, the agency disseminates illustrational materials sent by air mail. Also, we publish the bulletins "Panorama Economico Latinoamericano," "Sintesis Latinoamericana," "Direct from Cuba" and "Socialist Economic Integration," which is published in collaboration with the press agency "Novosti."

Prensa Latina publishes two monthly magazines: CUBA INTERNATIONAL (in Spanish and in Russian) and PRISMA LATINOAMERICANA, which deal not only with the contemporary situation in Latin America, but also on the entire planet.

The quarter of a century of fruitful activity of Prensa Latina is a striking refutal of the grim forecasts of the U.S. information agencies which predicted its imminent death. The agency lives, and by way of its activity, it actively assists in information decolonialization.

12404

UPPER VOLTA NEWS AGENCY DECISION LAUDED

LD032132 Moscow in English to Africa 1700 GMT 3 Jul 84

[Excerpt] The Government of Upper Volta has given the Volta press agency AVP the exclusive right to collect and spread information in the country and report it to other nations. Yuriy Rogov makes these comments:

The decision of the Government of Upper Volta is a serious step forward on the path to a new national information order. From now on only the local press agency will conclude agreements with foreign news agencies on the purchase, sales and exchanges of information and photos. This will close one of the channels of slanderous propaganda to Upper Volta.

The Western media used this propaganda to destabilize the political situation in the country. Certain circles in the West are dissatisfied with the social and economic reforms carried out in Upper Volta. This explains the hypocritical campaign launched in a number of West European countries in defense of (?persons) tried by a revolutionary court on charges of corruption. Acting under the flag of human rights the West is trying to arouse sympathy for members of the old regime, the policy of which suited transnational corporations that used to rob the natural resources of Upper Volta and exploit its farmers and workers.

The majority of African governments have set themselves the task of putting an end to the domination of Western press services in the spheres of spreading the news in Africa and close the channel to hostile propaganda. As we see the Government of Upper Volta has started to carry out this task.

cso: 5500/1026

USSR's FIRST LASER COMMUNICATION LINE REPORTED

Leningrad LENINGRADSKAYA PRAVDA in Russian 30 Apr 84 p 2

[Article by Leningrad TASS: "Laser Communication Lives!"]

[Text] A laser beam passed through the thinnest glass thread has connected the Laboratory of Aerial Methods of the USSR Ministry of Geology with computers of the Leningrad Scientific Research Computation Center of the USSR Academy of Sciences. Yesterday our country's first permanent optical-fiber communication line started operating here. Its acceptance report was signed by the chairman of the Presidium of the Leningrad Scientific Center of the USSR Academy of Sciences, Hero of Socialist Labor Academician I. A. Glebov. The line is operating in the system of machine processing of images. It was used to transmit aerial photographs of almost inaccessible regions for interpretation and analysis of geological structures on computers. The line was developed and put into operation by Leningrad specialists jointly with scientists of the Institute of General Physics of the USSR Academy of Sciences.

According to the director of the Computation Center, Professor V. M. Ponomarev, it has become possible to transmit one thousand times more information without the slightest distortions than through the conventional wire communication channels.

The advantages of optical-fiber laser systems, as the scientist explained, are their enormous traffic capacity, absence of interference and long service life, since fiberglass, unlike the tranditional metal cables, is not subjected to corrosion.

The first laser communication line will be used for studying and improving receiving and transmitting devices of optical waveguides. The immediate goals of the Leningrad scientists for subsequent practical directions in the use of the new type of communication include the development of such communication lines for local computation networks at flexible automated plants of the leading enterprises of the city.

10,233

LONG-DISTANCE TELEPHONE SERVICE IN LENINABAD OBLAST CRITICIZED

Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 13 Mar 84 p 2

[Article by M. Ivanov: "Hello, Hello!..]

[Text] There are many complaints about poor operation of long-distance telephones in Leninabad Oblast. This is not surprising. Since December 1979, they have been installing "Kama" equipment for multichannel communication, but they have not been able to put into operation more than one half of its capacities. The installation of an expensive "Elektronika" system has been in progress for several years. Only 10 of its 30 channels are in operation. They operated for half a year and failed. Then the communication workers acquired two other identical sets, but this time for sixty channels. With great difficulties they put forcy channels into operation, and at the same time acquired another set for which, so far, they haven't found any use. All this equipment cost about 370,000 rubles not counting the cost of installation. Out of the 120 channels, only 40 are operating, and even then sporadically. No one bored the responsibility for that, incidentally, just as for the "expropriated" measuring laboratory installed in a UAZ [UI'yanovskiy Automobile Plant] van. The van, of course, is still running but the equipment from it has been thrown out a long time ago.

The intolerable treatment of expensive equipment was discussed at a meeting of the Leninabad Oblast People's Control Committee. The Committee made the following answer for this: V. Rezakov, chief of the communications administration, Ye. Shnitman, chief engineer, and A. Maksimova, chief of the telecommunication service.

10,233

NORDIC MOBILE TELEPHONE SYSTEM EXPERIENCES RAPID GROWTH

Oslo ARBEIDERBLADET in Norwegian 14 Jun 84 p 25

[Article: "The Mobile Telephone: A Problem-Filled Success"]

[Text] The Norwegian Mobile Telephone (NMT) has become a gigantic success both here at home and in the other Scandinavian countries. So big a success that it is about to become an enormous problem for the telecommunications agencies in the Scandinavian countries. Far more mobile telephones have been sold than the system can manage to tolerate. The result is that users have many difficulties in getting through.

"Some times during the day, primarily in downtown Oslo, the problems are big. We are working intensely on new technical solutions, but any immediate improvement of the ability to get through cannot be promised," Telecommunications Agency Information Chief Thor Viksveen tells ARBEIDERBLADET.

Forecasts

When the NMT was introduced it was figured that today's net capacity would cover the demand up to the end of the 1980's. However, the demand for this service has proven to break all boundaries. The demand has been far greater than assumed. In addition, the total of 11 suppliers of various types of mobile telephones have done a very aggressive marketing job. This has quite surely also had a lot to say for sales.

Last year 14.2 million calls were made in the NMT system, equaling 107 million message units. This is an increase of several hundred percent over the forecast.

Nine Hundred per Month

At the end of April of this year there were over 28,000 mobile telephones connected to the NMT system. The number of subscribers is increasing by about 900 per month. Over 11,000 of these are in the Oslo-Akershus region. Today we have already reached the number of subscribers which the Telecommunications Agency according to forecasts assumed would be the total in 1988.

"We are of course happy that the NMT service has been received in this way beyond all expectations, but the success is creating quite obvious problems for us," Viksveen says, who can report that about 40 percent of all NMT traffic takes place in the radius of 21 km from downtown Oslo.

The Oslo Problem

The problems in getting through have therefore become the biggest in the capital, and especially during ordinary daytime on weekdays. There are no problems in getting through, even not in the middle of Oslo, outside of the most hectic hours during the first five days of the week.

The Telecommunications Agency is now working on finding temporary solutions in order to remedy some of the traffic concentration in Oslo. This will involve a relief system specially intended for heavy users in this area.

A permanent solution to the problem will first come when a new mobile telephone system is put into service. This system will be established in the 800 to 900 MHz band, whereas today's system uses the 450 MHz band. However, extensive work is required before the mobile service can be established in a new system, and for this reason it can be put into service at the earliest in 1986. Viksveen reports that all earlier plans to expand the NMT system are now being sped up in order to remedy the situation.

Outside of Oslo

However, you do not have to go far out of the capital before the service functions totally satisfactorily, and in other parts of the country you do not have so hard a time in getting through. The NMT service has been established in Norway today in East Norway and West Norway. Toward the end of the year the mobile telephone will be open also for users in Central Norway.

The NMT has also become a big success in the other Scandinavian countries, primarily in Denmark and Sweden. For this reason, Stockholm and Copenhagen are struggling with the same problems in getting through as Oslo is. However, the NMT, seen as a whole, has become the biggest success in Norway, in that our country today has almost as many subscribers as Sweden and far more than Denmark.

8985

AEROSPATIALE, MBB EXPAND TIES WITHIN EUROSATELLITE

Paris ELECTRONIQUE ACTUALITES in French 29 Jun 84 pp 1, 12

[Article by H. Pradenc]

[Text] Aerospatiale, the first European manufacturer to receive satellite contracts for foreign countries (Arabsat and Tele-X), has strengthened its cooperation with the German company MBB in order to penetrate the space telecommunications exportation market. An outgrowth of developments already completed, the Spacebus platform family was designed in this light within Eurosatellite, a joint subsidiary of the two companies.

Eurosatellite Is Growing

The activities of the Ballistic and Space Systems Division represented 3.4 billion francs in 1983 out of a total of 24 billion for all Aerospatiale activities. The civilian space sector represents 30 percent of the division's activity. This industrial segment will undergo a large growth compared to Aerospatiale's military activity. A decision was therefore reached to strengthen the French-German cooperation with MBB in entering the foreign market.

A new agreement broadens the framework of the Eurosatellite group--initially consisting of Aerospatiale and MBB, both of which were primarily involved in satellite integration--to include Thomson-CSF and AEG-Telefunken, specialists in payloads, as well as the Belgian company ETCA (Technical Studies and Aerospace Construction). It is understood that this cooperation remains open to other partners, added Henri Martre, Aerospatiale chief executive officer, in speaking to the press on 22 June at the Cannes center.

In outline, task distribution between the two integrators assigns to the French company the fabrication of platform structures, of satellite heat control systems, and of electric power supplies. MBB is in charge of solar generators, as well as of stabilization, remote control, and remote measurement devices. AEG-Telefunken, which supplies solar cells, could subcontract the fabrication of solar generator structures.

The North American market for telecommunication, computer communication, and television satellites is growing. By itself, it amounts to one-half of the 100 billion francs represented by the international demand for the next 10 years. The European or Japanese demand is not undergoing the same growth. On the other hand, sales possibilities to developing nations are slowing down.

The Aerospatiale chief executive officer does not give precise figures for his company's exporting expectations, but he does indicate that it will share with Matra the production of about eight satellites per year for foreign users.

"Although the idea of a heavy satellite is associated with that of television broadcasting," Aerospatiale observes, "many current applications are for other purposes." Inded, several heavy satellite projects, such as Intelsat or TDRS, fall in the telecommunications area, or have mixed objectives, as is the case for Tele-X, L Sat (Italy), or Unisat (Great Britain). Also noted is the fact that the American programs for direct TV satellites specify a minimum power of 200 W and eight channels for most of them. They will use platforms weighing at least two tons, of the type Spacebus 300 in the family of platforms developed by Eurosatellite.

The group's strategy is based on the joint production of a single family of multipurpose geostationary platforms of complementary sizes, named Spacebus 100, 200, and 300. This family is a direct descendant of the developments acquired by Arabsat, Intelsat V, and TDF/TV Sat, respectively. The three platforms are equally adaptable to Ariane launchers and to the American shuttle. The specifications of the satellite system include a three-axis attitude control for transfer to final orbit and for the operational phase, as well as the installation of specialized programmable on-board processors which use elaborate control algorithms. A radiofrequency beacon sensor and an antenna pointing system (Sofa) make it possible to orient the sending beam with a precision greater than one-tenth of a degree. These platforms have already been offered in response to bids.

Spacebus 100, with a transfer orbit weight of 1100 to 1800 kg, was offered for the Chinese television satellite, and under Marconi's leadership, for the 2-9 satellite program of the Inmarsat organization, as well as for the new, second generation satellite ECS program of Eutelsat. Discussions are presently underway for an Argentinian program.

The Spacebus 300 platform, with a weight of 2000 and 3500 kg, was offered to Saudi Arabia and to USSB [as published] for direct television satellite programs. In addition, if the American DBCS project is started, Aerospatiale will receive 10 percent of the program with Ford-Aerospace as general contractor. Of intermediate size, Spacebus 200--derived from Intelsat V, is designed for telecommunication satellites with 20 channels at 40 W in the C-band, or 16 channels at 50 W in the K-band, or 6 channels at 230 W for television broadcasting.

Meteosat For the Japanese

In meteorology, Aerospatiale will be general contractor for three flight models and a spare unit of Meteosat satellites for the Eumetsat organization, whose launchings will occur successively in June 1987, September 1988, and November 1990. Additionally, a joint offer from Aerospatiale-Arianespace-ESOC has been made to Meteosat for a satellite in Japan, to replace the weakening satellites in that country.

Derived from the Spot observation satellite, the largest platform built by Aerospatiale until now (more than two tons), a military vehicle is planned in a French-German framework. For this satellite, Aerospatiale and MBB have completed a study for the Samro viewing device, and are in a good position for this project.

11,023

BRIEFS

EC COMMUNICATIONS NET LOAN--The European Investment Bank has just granted a loan of 29.3 million kroner for expansion of telecommunications in Greenland. The loan, which has a maturity of 15 years, will be used by the Ministry for Greenland Affairs for improving of radio links, telephone communications, expansion of local transmission lines and telephone exchanges, as well as for establishing of a data communications network. The project, which is budgeted at 71 million kroner, is the fourth in a series of telecommunications projects in Greenland to which the European Investment Bank has contributed. [Text] [Godthaab GRONLANDSPOSTEN in Danish 18 Jul 84 p 48]

cso: 5500/2747

FRENCH GOVERNMENT DECIDES TO UTILIZE 'TDF-1'

Paris AFP SCIENCES in French 21 Jun 84 pp 19-20

[Text] Paris--The secretary of state for communications techniques, Mr Georges Fillioud, confirmed officially on 20 June, in a note to the Council of Ministers, that France will "operate, from the beginning of 1986, the direct-TV satellite 'TDF-1,' designed and built under the Franco-German industrial cooperation agreement."

The actual management of the satellite and of those of the same type that will succeed it will be turned over to a company that is in the process of being formed around TDF [TELEDIFFUSION-FRANCE], and that will include, besides the CNES [National Space Studies Center] and the DGT General Directorate for Telecommunications] of the Ministry of PTT, certain banking establishments and possibly certain industrial groups capable of providing it with the necessary technical, financial and commercial resources.

This company will be responsible for negotiating the lease of the satellite's four television channels. The government still hopes that the use of two of these channels can be worked out with the CLT-RTL [Luxembourg Television Broadcasting Company-RTL], despite the concession the Luxembourg government has just granted to the competing project "Coronet" (see AFP SCIENCES No. 406, 30 May 1984, p 21).

Talks between the two countries are to be resumed shortly, it was announced, after having been suspended a few weeks ago.

Thus, channel 3 of TDF-1 could be dedicated to a French-language commercial network shared on, say, a 60/40 basis by CLT-RTL and, possibly, other outlying stations, respectively. Channel 4 could be dedicated to a German-language network to be operated jointly by CLT (60 percent) and the German group Bertelsmann (40 percent).

Some 10 plans already exist in the files of the Secretariat of State for Communications Techniques for the use of the remaining two channels jointly with the public audiovisual service. The government states that "it has decided to organize a concerted plan governing the content and financing of these last two channels.

In deciding irreversibly to operate TDF-1 (the launching of which has been scheduled for November 1985) commercially, the Government has reaffirmed its confidence in this satellite, which some experts—within the Ministry of PTT itself—have considered to be technically outdated.

"TDF-1," Mr Fillioud's office says, "is the only dependable project at this time, the only one for which a definite launch date, operating criteria and frequencies can be announced."

The FRG [Federal Republic of Germany], too, decided on 20 June to go ahead with an identical project, as did also England, which will grant the use of the channels in its satellite to the BBC and to the consortium of private British networks IBA. The French Government considers that these examples should encourage other European countries—which may still be hesitant—to take the same approach.

The extensive complementarity of the French and German projects is emphasized by the same source. The two satellite systems will, in less than 2 years, enable the viewers in both countries—but also those of other European countries—who are equipped with a parabolic antenna 80 cm in diameter (costing around 5,000 francs) to receive seven program channels: Three in French and four in German, to which digital—sound audio channels will be added, that will provide an unprecedented quality of sound.

 χ The Government estimates that within 10 years France will have some 5 million collective antennas and 500,000 individual antennas.

9238

BRIEFS

ALBANIAN COMMUNICATIONS ACCORD--Milan, 27 Jun (ANSA)--Italcom, a company formed of Italtel, GET and Telettra, will supply Albania with electronic and telephonic networks to renew that country's telecommunications system. The new accord follows by just a few weeks Italcom's contract to create a new telephone system for Mozambique, a company communique noted. [Text] [Rome ANSA in English 0945 GMT 27 Jun 84 AU]

TELECOMMUNICATIONS AGENCY TO ENTER CABLE SECTOR

Oslo ARBEIDERBLADET in Norwegian 4 Jun 84 p 7

[Article by Jan \emptyset . Helgesen: "Gets Yes From Government for Cable: Things Are Loosening Up for the Telecommunications Agency"]

[Text] Things are loosening up for the Telecommunications Agency! This is the reaction in the State company after the government on Friday voted to give the Telecommunications Agency a chance on the cable front. Private cable interests are characterizing the temporary guidelines as a "gift package!"

"I do not think that it is right to call this a gift package. It is a fact that the Telecommunications Agency has in many areas not been getting done what is expected of us and what is requested of us—because guidelines have been lacking. Now we can get started," Telecommunications Agency Information Chief Thor Viksveen tells ARBEIDERBLADET.

Concrete

The Telecommunications Agency has lying in a draw a number of concrete projects for cable development, projects which have been at a standstill in waiting for the temporary guidelines which have now been passed. In Oslo the Telecommunications Agency submitted a bid, and won, for an OBOS [Oslo Housing and Savings Group] lot in Holmlia. In Kristiansand the city council has voted to establish a cable company of which both the Telecommunications Agency and the FAEDRELANDSVENNEN newspaper will be a part. A similar project is under way in Kristiansund.

"It is interesting that in many cases we in the Telecommunications Agency will have extensive and close cooperation with private interests," Viksveen says.

Monopoly

The new decisions involve the fact that the Telecommunications Agency is to take care of development of the so-called long-distance network—and, for the main part, also of the local network. Competition between the agency and the private sector will be for the last bit of cable, from the terminal exchange to the TV set in the living room.

"It is not right for the the Telecommunications Agency to have a monopoly on this work also. We want to compete with the private sector on an equal basis."

[Question] So-called cross-subsidizing, taking money from one place in the Telecommunications Agency and supporting, for example, cable projects, or organizing development so that just the Telecommunications Agency can do the last part of the job, are being singled out as danger factors. Do you have any comments?

[Answer] "I cannot say otherwise than that both will not take place. The guidelines which exist now are indeed temporary. We do not want to throw away the trust we have received from a united government by evading or stretching the guidelines," Thor Viksveen of the Telecommunications Agency says.

8985

TELECOMMUNICATIONS INDUSTRY MEETING VIEWS FUTURE PROBLEMS

Oslo AFTENPOSTEN in Norwegian 18 Jun 84 p 32

[Article by Ulf Peter Hellstrøm: "Industry Federation Turns 60: Radio Industry in Transformation"]

[Text] Computer technology's entry into television, radio and other consumer electronics will transform the radio and TV industry's product range and competition situation.

The past's dealers of crystal radios and black-and-white televisions are now re-educating themselves in order to sell elements of the multimedia equipment which the industry envisions in homes as microprocessors become more widespread and telematic services are introduced.

The Telecommunications Agency's proposals regarding telecommunications shops involve an administrative department's dangerous entry into a market which is already covered by hundreds of small private concerns nationwide.

These are parts of the situation picture which the Norwegian Radio and TV Dealers National Federation sees for its 600 member companies as the organization is now turning 60.

"This industry is characterized by rapid technological development. The milestones which we talk about in the industry seem to constantly come closer to one another. I have stayed in this industry for the last 25 years and now and then have the feeling that I have spent the last 20 of them in school," says the chairman of the anniversary-celebrating federation, Radio Dealer Rolv Snare from Kongsvinger.

Six Hundred Member Companies

The radio and TV dealers federation numbers about 600 member companies with about 6000 employees. In addition, there are service personnel and those employed in two associated organizations, i.e., the Antenna Installers Group and the Mobile and Marine Electronics Group. The federation is older than NRK [Norwegian Broadcasting Service] and had 39 radio businesses as members at its founding. The number rapidly grew to over 1100, then to drop to about 600. The membership figure has been rather constant since the war.

Sales have shown a strong increase in pace with increased buying power and the entry of television and stereo equipment. In 1950, member companies represented 40 million kroner in combined sales. Twenty years later the companies passed a half billion kroner, and 10 years later the figure was 2 billion kroner. Over half of the member businesses are today organized into chains. Gross earnings are 25 percent on average, while net earnings are usually 2 to 3 percent, says Director Ove Mangdal, who leads a secretariat of 10 people in Oslo.

Five Epochs

The industry's product range has become constantly larger in the decades since the federation's founding. While radio sets dominated before the war, the Hi-Fi idea and the large "floor models" came to characterize the 1950's. Long-playing records, tape recorders and the first stereo version of records came in this decade, but stereo equipment became a big sales success first when the 1960's arrived. In addition, from 1960 started big sales of televisions for black-and-white broadcasts, and transistors arrived as a replacement for vacuum tubes.

The next milestone was 1970, when sales of color televisions took off and formed the economic backbone of the businesses for five or six years. In the 1970's integrated circuits and other electronic components also began to be used seriously in the compact electronics which now dominate the insides of the products which fill radio and TV dealers' shop shelves. Then toward the end of the 1970's came the video cassette recorder, which now constitutes an important part of sales.

"According to the forecasts for 1984, our member companies will this year sell 145,000 color TV's for about 900 million kroner. Sound reproduction equipment will represent an equally large share of sales, while sales of 50,000 video recorders will probably amount to about 325 million kroner. Servicing and other sales will contribute to sales' reaching 2.2 billion kroner this year," Magndal [as published] says.

Picture of the Future

In digitalization's future, radio dealers—and others along with them—envision an integrated network, one element of which is a large flat TV screen on the living room wall. The television receiver can be programmed to record special types of programs. Record players and audio and video cassette players are also connected to the system.

Within the home's four walls the radio industry also envisions a personal terminal, possibly with a personal monitor for high-resolution graphics, which the consumer can use as a local computer or as a window out to a world where orders, information and 2-way communication can flow through a fiber optic cable network which covers Norway and foreign countries. Here it is possible to obtain video films, search in data banks or bring yourself up to date by means of electronically implemented remote instruction. The cable network also provides space for signals from NRK, satellite-based stations and local

TV together with text TV, pay TV and telecommunications services like Teletex and Telefax.

"We will hardly get to see this picture of the future in fully developed form on this side of the turn of the century. However, the decisions regarding which forces in the community and industry will be the central participants in this information society are being made already today. The radio industry is confronting a restructuring which our members have hardly participated in. We are getting new competitors in computer suppliers and integrated information companies who want to aim at taking market shares in this multimedia market."

Competition

"We want to compete on an equal basis with others. The Telecommunications Agency's entry into competitive markets—symbolized by the proposal for a large number of telecommunications shops nationwide—however, arouses anxiety among our relatively small member companies. We cannot see how competition circumstances can be equal when an administrative agency with responsibility for the approval of types and authorizations will be able to sell both monopoly services and office, computer and telecommunications equipment in free competition with established private concerns."

"Although the Telecommunications Agency says that cross-subsidizing will not take place, we are afraid of a situation in the future in which the service can operate with artificially low prices for competitive products in the assurance that a government service cannot go bankrupt, whose profits come on the monopoly side and, in addition, has a monopoly on increasingly more important telecommunications services. In addition, in its role as an administrative department the Telecommunications Agency is considered by many as a neutral and confidence-instilling adviser. This gives the department an advantage in its marketing which in itself is of importance for the competition for markets."

"The Telecommunications Agency can have a decisive role in the coordination of electronic communications so that different systems can 'talk' to one another. The radio industry also does not have any protest against the Telecommunications Agency's now being given the go signal to work on cable development. But let it stop at this," is Mangdal's opinion.

8985

cso: 5500/2727

ELEKTRISK BUREAU FIRM SEEKING GROWTH FROM FOREIGN MARKETS

Will Compete with High Technology

Oslo AFTENPOSTEN in Norwegian 19 Jun 84 p 38

[Article by Kjell Aaserud: "Elektrisk Bureau to Grow Abroad"]

[Text] Elektrisk Bureau (EB) on Monday presented a strategy plan in which strong growth abroad is being aimed at and a restructuring aimed at stabilizing the firm in Norway. Today EB has a foothold in 15 places in the world. Last year about a third of sales came from foreign markets. In already two or three years foreign operations will produce about a half of sales.

"When we discuss strategy and the future, we are speaking more about customers than about products," Administrative Director Kjell Kveim said when the new strategy plan, which will be under continuous reassessment, was proposed. "We are now asking what customers want to have, not what products we have which can be sold in various markets."

The new strategy-with increased foreign business-will result in personnel cutbacks at work places in Norway. According to Director Tore Egil Holte of the telecommunications division, the number of employees will be reduced by about 1000 over three years. The cutbacks have already started. At the factory in $\operatorname{His}\phi y$ 70 have stopped working, 40 of whom were given notice.

"It is a gigantic job to restructure a concern with 5000 employees toward new customer areas," Kjell Kveim said. "For one thing, we must readapt skills." EB is now using 15 to 20 million kroner a year for retraining. Representative Tore Hellum admitted that it is necessary that it be clear that there in any case will not be any upswing. The question for employees is to reduce cutbacks as much as possible. In the situation they are in, wishful thinking is of no use. The employees have misgivings with regard to EB's foreign manufacturing. Hellum—supported by Tore Erik Holte—expressed the fact that high-technology equipment, which requires automation and heavy capital investment, can be produced just as inexpensively in Norway as abroad.

According to Kveim, EB will be given a decentralized form of management. The individual entities will have full responsibility, for finances, too. They must be flexible at any time and be able to readapt in pace with market

demands. World markets are the subject of great changes. For example, a trend toward greater liberalization is seen, something which suits EB. But Norway is not to be an open market for competitors from closed countries. France, for example, continues to be very closed.

In addition, it can be seen that telecommunications and computer technology are mixing together more and more. According to Kveim, EB has a good starting point here. It is easier for a telecommunications firm to master computer technology than vice-versa. The "soft" share of orders is increasingly steadily.

"Norway is too small a market for our products and niches," Kveim stressed.
"We started our internationalization in a part of the world which did not have a telecommunications industry. EB has built up know-how both in the marketing aspect and technological aspect. Experience has been gained in order to be able to win 'complete packages' in competition with, for example, Japanese companies, while it is very difficult to compete with Japan in quantity production."

"In our strategy plan we present conscious thoughts for the future," Kveim said. "Today there are about 20 market niches where we see good potential. A task for us is to lay the framework for the information society."

The strategy plan, which has been submitted for up to 1989, has a number of concrete goals. Director Jan Erik Larsen reported, for one thing, that EB has the goal of increasing total profitability to 16 to 17 percent up to 1989.

Elektrisk Bureau (EB) increased its operating income by 20 percent in the first quarter, to 746 million kroner, while the figure for extraordinary items dropped from 42 to 40 million kroner. This must be viewed in connection with the fact that EB is increasing on an annual basis its investment in research and development by 50 to 60 million kroner, to 250 million kroner, an investment in the future, as expressed at a press conference on Monday by Administrative Director Kjell Kveim.

Total profitability dropped from 9.3 percent in the first third of last year to 8.7 percent this year, while the figure on an annual basis in 1983 was 8.2 percent. The percentage of net capital is about 30 percent.

According to Director Kveim, EB does not intend to increase share capital in the near future, in spite of the fact that the firm has applied to the authorities in Thailand to have a telephone set factory established there. They are awaiting clarification of the matter in the late summer. Total investment will be about 40 million kroner. The factory is designed to produce 400,000 telephones per year. Negotiations have been entered into with local companies to form a joint-venture company which will own and operate the plant if the authorities give the go signal.

Director Tore Egil Holte of the telecommunications division in this connection emphasized that the ASEAN countries cover a very large area with a sparse

distribution of telephones. For this reason a demand exists. With a factory in the area there will be bigger opportunities to reach the goal in the local market. Know-how, components and other equipment would be supplied by EB in Norway.

Telephones represent one of the telecommunications division's big fields. EB has used several million kroner on developing a compact pushbutton telephone which the firm is to supply 33,000 of this year to the Telecommunications Agency and 160,000 over three years. These will be produced in $\text{Ris}\phi\text{r}$. The telecommunications division, which consists of five independent fiscal entities, will sell 960 million kroner worth this year. Testing and monitoring is an important field. EB has just supplied a project in Singapore which has the objective of monitoring telecommunications networks. A new field has been adopted—operations centers for air traffic control. The first has already been sold to Great Britain. Now they are going out into the world market with it.

Telematics Sector Emphasized

Oslo AFTENPOSTEN in Norwegian 28 Jun 84 p 5

[Article by Kjell Aaserud: "EB Internationalizes: From Products to Systems"]

[Text] Not too many years ago the Elektrisk Bureau firm (EB) was, so to speak, exclusively oriented toward the Norwegian market, with the Telecommunications Agency as its major customer. EB supplied products. The only export goods of significance were marine radio stations. Over the course of a couple of years EB will gain half of its income from foreign markets, not in the form of exports of products, but of systems built on the firm's own know-how and tailored to the markets EB itself finds.

It is the firm's Administrative Director Kjell Kveim who tells this to AFTENPOSTEN. He adds: "It seems to us that we are out at the right time in the great majority of the fields we are working in. Therefore, we have also set ourselves the objective of doubling our total profitability as quickly as possible. The time is ripe for commmercial exploitation of our technological developments. We have a systems foundation which has shown itself to have breakthrough strength in markets."

Since 1975 EB has been through an intense readjustment. Market niches have been developed and the company has taken a position in 15 places in the outside world. Revenues are to come from turnkey projects and systems. Kveim stresses that know-how is more than engineering and technology. It concerns the management of projects in foreign cultures and economics, management and knowledge of the market demands which it is the goal to meet.

Assets in Systems

"An account of our strategy can easily appear platitudinous, but it is in reality a question of hard purposeful work," Kveim stresses. We will increase

the creation of assets. The possibilities are now fewer, of reaching one's goal through increased production of finished products. Instead we will find out what demands the markets want covered. We recently concluded an international seminar in EB's management. Our people abroad were all unanimously optimistic and prepared for a readjustment in pace with market demands."

"Telematics, which we work in, can be said to be at the frontier between telecommunications and computer technology. The key to success lies in finding out what customers need and tailoring systems to this. England is a highly demanding market. There some time ago we got to participate in an experts' report on local power supply systems, in a discussion of the control and monitoring of power distribution. They found out that we knew so much about these things that it resulted in a 50-million-kroner development contract. On the way we received contracts for an additional 200 million kroner and thereby we are in the process of supplying the nerve system for the entire, so to speak, English power distribution network. Now we are on the offensive in all parts of the world with this type of nerve center, which has given us combined contracts for 400 million kroner."

"Nerves" in the Air

"Another nerve system—air traffic control—has been sold to London's Heathrow Airport. This is again an example of our having found out what users—in this case, 250 controllers—needed. Now we are looking for a partner in air traffic control in the USA. We are on the threshold of the automation of air traffic control over the entire world. In this field, too, we think we are able to be completely equal to the best."

"We are very occupied with the USA. A foothold there is a good reference everywhere. But for several reasons we would like to cooperate there with companies which complement us. We have a private company in Houston in telecommunications for the oil sector. This will produce chain reactions over large parts of the oil world. We are selling products with a strong market to American companies, whereas we are finding partners for systems. In this manner we are now nearing the flight safety field through public buyers."

"We have technology for controlling and monitoring other technology. The markets have a need for this, but actually we ourselves have to find out what the needs are, because others perhaps do not see them, "Kveim says. "We can take offshore as an example. We have a good foothold in the North Sea and have positions other places in the world, and now we have entered into a joint-venture company on a 50/50 basis in Canada. The decisive thing is to find the markets at the right time. Our subsidiary company—Norsk Kabelfabrik [Cable Plant] in Drammen—for example, found a market with its offshore cable and now is prioritizing the development of fiber optic cables, which is quite surely a growth field."

"That it appears that we will now well reach the goal of becoming international we can to no small degree thank the takeover of Nera in Bergen for. Nera had good knowledge of markets and could manage projects. To be precise, it has become our management—from drawing and building to delivering the whole thing

with the key in the door--although we hire expertise when we ourselves do not have it. Now Nera is occupied with satellite systems--also a growth field."

Increased Market Development

[Question] There has to be a strong economic backbone to bear research and development costs of 250 million kroner or about 10 percent of sales, has there not?

[Answer] "In our fields this is completely necessary. On the other hand, this item will hardly be increased in the immediate future. It can be said that now we have a period of technological development behind us, although it will always continue. But we now have a systems foundation to gain a still better foothold in a number of markets. Now for a time we will to a certain extent reprioritize from system development to market development in order to be able to exploit our systems commercially."

"We have taken on a heavy economic load in order to be able to restructure EB. It has not been easy, and it is not easy when we know that we have 5000 fellow workers to take into consideration. Good earnings is the most important goal of all, because only this can create development. Tomorrow's EB will be a company which is strong in those markets in which we see opportunities, and it will have extensive systems know-how and know-how in several product areas like telephones and cables."

"We will increase the creation of assets through deliveries of systems more than through direct production, because this produces greater opportunities for reaching our supreme goal of increased profitability," Administrative Director Kjell Kveim says.

Success in Phone Instrument Exports

Oslo AFTENPOSTEN in Norwegian 28 Jun 84 p 5

[Article: "To Put Stakes on Factory Exports"]

[Text] Elektrisk Bureau (EB) is at the forefront of international development as far as the manufacture of telephones is concerned. The latest compact pushbutton phone consists of one part—the former telephone receiver, which can be regarded as a computer and can perform a number of functions. The new pushbutton telephone was developed in record time. Production is taking place at the factory in ${\rm Ris}\phi r$, which has been automated to such an extent that the pushbutton telephone will not be less expensive to produce in low-cost countries.

"When we will now, we hope, be getting under way with a 40-million-kroner telephone factory in Thailand, it is in reality the factory itself which we are out to sell," Administrative Director Kjell Kveim says. "Many will perhaps ask why we do not rather produce in Norway when it can be done just as inexpensively here. Our experience tells us that it is now impossible, so to

speak, to gain breakthrough strength for products which can be produced locally. In Thailand we hope to get a joint-venture company and we hope it does not stop at this. Our goal is for the Risør plant to become a model for similar plants in several places," Kjell Kveim says.

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SWEDISH BUSINESS SATELLITES WILL COVER ALL OF EUROPE

Stockholm DAGENS NYHETER in Swedish 30 Jun 84 p 9

[Text] The Swedish economy has thoughts of conquering space. In four years, the newly formed European Business Satellite (EBS) company hopes to set up the two first European business communication satellites.

The satellites will cover all of Europe, relaying business information, data and perhaps even cable television transmissions. The cost of the project has been estimated at 1.6 million Kronor.

Management Venture Capital (MVC) and its daughter company EBS are behind the so-called EBUS satellites.

They are owned in equal shares by the Skandia insurance company, the medical/dental company Praktikertjanst, Skrinet, and Enator, the consulting firm.

MVC was formed last year and has share capital totalling 24 million kronor. The firm is one of Sweden's largest in its field.

Earlier this year EBS submitted an application to the State Delegation for Space Operations seeking a license to intermediate business communications via satellite. In the final analysis, the government will decide the issue.

Similar applications have been submitted in Norway and Great Britain. Licenses are required by the national telecommunications authorities in all of the countries EBS will cover.

EBS plans to send up two satellites, each with 14-channel capability. They will be placed in orbit above the equator with the help of an American space vehicle--such as the "Columbia"--or by a French Ariane rocket.

The companies involved in the EBUS satellite project are not put off by the enormous costs involved.

"Our calculations indicate that the operation will be extremely profitable. Many major corporations in Sweden and the rest of Europe have stated that they are willing to provide capital," says Enator General Manager Christer Jacobsson.

He reports that various interests have been offered part-ownership in the project and that the company will be listed on both London and Stockholm stock exchanges in 1987.

The United States has already placed a number of business communications satellites in orbit. But EBS General Manager Leif Lundquist is not afraid of competition from the Americans.

"We are located in Europe, and we are the first on this side of the Atlantic," he claims. "That speaks well for our project."

Jan Stiernstedt is the chairman of the State Delegation for Space Operations.

"A law which was passed two years ago requires that a license be obtained before space operations may be undertaken. We members of the delegation will prepare the government's official stand," he reports.

"If a satellite caused damage anywhere, the country from whence it is controlled will be held responsible for the damage. This is the reason for our controls," continues Jan Stiernstedt.

He hopes that the government will come to a decision in the fall or, at the latest, by next spring.

The National Telecommunications Administration will also express an opinion regarding EBS' plans.

"It is always fun when something happens in my field. The EBS project is based on a sensible business idea, but I think that it may be difficult to obtain licensing from the various telecommunications authorities throughout Europe."

Bengt Halse--who is responsible for satellite operations in the Ericsson group--expressed this concern to DN (Dagens Nyheter).

"In terms of development, the satellite field is exploding. Within a couple of years I believe that there will be hundreds of satellites of this type in space."

In 1987 Sweden, Norway and Finland plan to send up a satellite called Tele-X. This satellite will be used for business communications but it will also relay television programming of the three countries over all of Scandinavia. The Ericsson group is involved in the development of Tele-X.

However, Bengt Halse does not view the EBS project as a competitor.

"No, I view it instead as a complement. The EBS concept assumes that the customers have ground stations, and we are well out in front in this field. If EBS succeeds in placing two satellites in orbit, the Ericsson group could benefit as well.

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